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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,638	04/15/2004	Lauren J. Kiest	7234.3001.002	9011

7590 01/17/2006

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EXAMINER

NOVOSAD, CHRISTOPHER J

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 01/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/825,638

Applicant(s)

KIEST, LAUREN J.

Examiner

Christopher J. Novosad

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2005 and 31 October 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/1/4 and 7/16/4  
(2 SHEETS)

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification Objections*

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The detailed description of the specification fails to provide support for the recitation in the claims of a “stand pipe.” Instead the pipe 219 is referred to in the detailed description as a “static head pipe” (page 8) or merely “a head pipe” (page 10). The detailed description should be corrected to refer to the pipe 219 as a “stand pipe” to be commensurate with the claim terminology.

Moreover, the recitation in claim 1, lines 12-14 of “a quieting area...that is *at least two times the entry passage area*” (emphasis added), and the recitation in claim 9, lines 14-15, of “the quieting section has a diameter that is *at least twice the diameter of the entry passage*” (emphasis added), fail to have proper antecedent basis or support in the specification. Correction is required.

Further, the recitation in claim 2, line 3, of “a spool holder support” fails to have proper antecedent basis or support in the specification. Instead, in page 8, lines 2 and 6, a “housing 301” for the spool 302 is referred to rather than a “spool holder support.” Correction is required.

The specification, page 9, lines 13 and 14, is not clear with respect to the recitation therein of “After each shut off valve 224 is a manifold exit to each knife is an orifice 226 ....” Apparently “knife is” in line 14 was meant to be --knife and-- instead. Clarification is required.

### ***Claim Objections***

In claim 1, line 2, “filed” should be changed to --field-- to correct a spelling error, and in line 6, “discharged” should be changed to --discharge-- to correct a minor grammatical error.

In claim 2, line 8, “passages” should be changed to --passage is-- to correct a minor grammatical error.

In claim 5, line 4, --of-- should be inserted after “one” as a minor grammatical correction.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1- 11 are rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 8, there is no proper antecedent basis for the recitation of “the separation chambers.” Apparently --the separation chamber-- was meant instead. Dependent claims 2-8 are indefinite for the same reason as parent claim 1 above.

In claim 9, lines 5 and 6, “*the top end* of the gaseous ammonia separation chamber” (emphasis added) has no proper antecedent basis in the claim. Dependent claim 10 is indefinite for the same reason as parent claim 9.

In claim 11, lines 10 and 11, the recitation “to control a gas head volume separation chamber” is indefinite. Apparently the above recitation was rather meant to be --to control a gas head volume in the separation chamber--. Correction is required to avoid indefiniteness.

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Further, in claim 11, line 10, the recitation “the saturation chamber” has no proper antecedent basis. Apparently --the separation chamber-- was meant instead.

Further, in claim 11, lines 12-15, it is not clear how the two recited steps of “employing an ammonia liquid head to maintain a pump pressure of above a saturation pressure of the ammonia; and pumping ammonia to a manifold and metering the ammonia from the manifold through orifices” are each functionally related to the previously recited “separation chamber” or *where* the recited “employing an ammonia liquid head” occurs relative to the previously recited steps of the method. Further, it is not clear whether the “ammonia” in the “pumping” step is the same ammonia as in the previously recited “employing” step. Clarification of the method in these respects is required.

***Allowable Subject Matter***

Claims 1-11 would be allowable if rewritten to overcome the claim objections noted above and the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher J. Novosad whose telephone number is 571-272-6993. The examiner can normally be reached on Monday-Thursday 5:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Thomas Will can be reached at 571-272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher J. Novosad  
Primary Examiner  
Art Unit 3671

January 16, 2006